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EXAMINER

GREENHUT, CHARLES N

ART UNIT PAPER NUMBER

3652

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/753,202	EDWARDS ET AL.	
	Examiner	Art Unit	
	Charles N. Greenhut	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

I. Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/06 has been entered.

II. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-8, 12-15, 20-24, 32, and 36-39 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over COHN (US 6,010,298 A) in view of LEWIS (US 6,602,041 B2).

- 1.1. With respect to claim 1, COHN discloses a frame (24) a ramp platform (28), carriage (at 62) moveable with respect to the frame (24), a motor (72) coupled to the frame (via e.g., 62/54), a drive shaft (74), drive pulley (76), belt (80), and a release assembly (400). COHN fails to disclose the release assembly configured to disconnected and connect the drive pulley from the motor. LEWIS teaches a release assembly (3028) configured to connect and disconnect a drive pulley (shown with sprocket 4080b), from the motor (3052). It would have been obvious to one of ordinary skill in the art to modify COHN with the clutch mechanism of LEWIS in order to selectively engage or disengage the motor from the drive.

- 1.2. With respect to claim 2, COHN additionally discloses a release cable (464), and a release actuator (402).
- 1.3. With respect to claim 3, COHN fails to teach a sliding collar mounted on the drive shaft and pin extending therefrom. LEWIS teaches a sliding collar mounted on the drive shaft (4152) and pin extending therefrom (4160). It would have been obvious to one of ordinary skill in the art to modify COHN with the sliding collar and pin of LEWIS in order to selectively engage or disengage the motor.
- 1.4. With respect to claim 4, COHN additionally discloses a first end pivotable and a second end engaged with a sliding collar (Fig. 39).
- 1.5. With respect to claim 5, COHN additionally teaches a keyed collar. It would have been obvious to one of ordinary skill in the art to modify the clutch collar with a key in order to torsionally secure the collar to the shaft thereby enabling the transmission of torque.
- 1.6. With respect to claim 6, COHN fails to teach an opening for the passage of the pin. LEWIS teaches an opening for the passage of the pin. It would have been obvious to one of ordinary skill in the art to modify COHN with the opening of LEWIS to allow the pin to penetrably engage the collar thereby allowing for the transmission of torque.
- 1.7. With respect to claim 7, COHN additionally teaches the pulley having an opening.
- 1.8. With respect to claim 8, COHN fails to teach a stop collar on the drive shaft and a spring between the stop collar and sliding collar. LEWIS teaches a stop collar (4172) and spring (4170).

- 1.9. With respect to claim 12, COHN additionally discloses guide shafts (46), linear bearings (88) and pivot arms (84).
- 1.10. With respect to claim 13, COHN additionally discloses a member extending orthogonally between the pivot arms (28) and a torsion bar (82).
- 1.11. With respect to claim 14, COHN additionally discloses a torsion spring (301).
- 1.12. With respect to claim 15, COHN additionally discloses a bar (46) extending between the torsion bar and the end of the ramp providing a downward force against the end of the ramp (via 50).
- 1.13. With respect to claim 20, COHN additionally discloses the carriage having a profile approximately equal to that of the ramp (Fig. 9).
- 1.14. With respect to claim 21, COHN discloses providing a platform (28), carriage (at 62), a motor (72), a drive shaft (74), drive pulley (76), belt (80), and a release assembly (400). COHN fails to disclose the release assembly disconnecting and connecting the drive pulley from the motor. LEWIS teaches a release assembly (3028) configured to connecting and disconnecting a drive sprocket from the motor (3052). A sprocket-chain actuator arrangement is a well-known equivalent to a belt-pulley actuator arrangement. The clutch mechanism of LEWIS could easily be adapted for use with a belt-pulley drive as opposed to a chain-sprocket. It would have been obvious to one of ordinary skill in the art to modify COHN with the clutch mechanism of LEWIS in order to selectively engage or disengage the motor from the drive. COHN fails to disclose moving the ramp carriage assembly relative to the motor. This step involves merely the rearrangement of parts and is contemplated by

COHN at (Col. 14 Li 9-14). It would have been obvious to one having ordinary skill in the art to relocate the motor in order to accommodate design constraints.

1.15. With respect to claim 22, COHN discloses a release actuator (402).

1.16. With respect to claim 23, COHN additionally discloses pulling the release actuator with a cable (184).

1.17. With respect to claim 24, COHN additionally discloses pivoting the release actuator.

1.18. With respect to claim 32, COHN additionally discloses manually controlling the ramp when the pulley is disengaged from the motor.

1.19. With respect to claim 36, COHN additionally discloses providing pivot arms (84), linear bearings (88), and guide shafts (46)/(54).

1.20. With respect to claim 37, COHN additionally discloses a member extending orthogonally between the pivot arms (28) and a torsion bar (82).

1.21. With respect to claim 38, COHN additionally discloses a torsion spring (301).

1.22. With respect to claim 39, COHN additionally discloses providing a downward force against the end of the ramp (via 50).

1.23. With respect to claims 45 and 46, COHN fails to show the belt connected to the drive pulley when the motor is disengaged from the drive pulley. This limitation is a function of the type of clutch mechanism used. If the clutch mechanism of LEWIS, as discussed above, were substituted for that of COHN the result would be that the belt remains connected to the drive pulley when the motor is disconnected from the drive pulley. Note the analogous situation in LEWIS, where the chain 3056 remains

engaged with the drive sprocket (4080b) when the motor (3052) is disengaged from that drive sprocket.

2. Claim(s) 9-11, and 33-35 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over COHN (US 6,010,298 A) in view of LEWIS and further in view of HOLECEK (US 3,983,584 A).

2.1. With respect to claim 9, COHN additionally teaches a bearing block (116), and cable (184). COHN fails to teach a crank: HOLECEK teaches a crank (31). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the crank of HOLECEK in order to gain a mechanical advantage thereby facilitating manual actuation of the ramp.

2.2. With respect to claim 10, COHN teaches a pulley. It would have been obvious to one of ordinary skill in the art to modify the pulley of COHN to communicate with the crank handle to provide a mechanical advantage during manual actuation. COHN fails to teach a handle. HOLECEK teaches a handle (49). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the handle of HOLECEK in order to facilitate gripping the crank.

2.3. With respect to claim 11, COHN fails to teach a shaft connected to the handle and a one way bearing. HOLECEK teaches a shaft (47) connected to the handle (49) and a one-way bearing (88). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the shaft and handle of HOLECEK in order to prevent unwanted movement of the ramp.

- 2.4. With respect to claim 33, COHN additionally teaches a manual control bearing block (116). COHN fails to teach translating with a manual control cable. HOLECEK teaches translating with a manual control cable (22). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the cable of HOLECEK in order to obtain smooth controlled movement of the ramp.
- 2.5. With respect to claim 34, COHN teaches a pulley. It would have been obvious to one of ordinary skill in the art to modify the pulley of COHN to communicate with the crank handle to provide a mechanical advantage during manual actuation. COHN fails to teach a crank handle. HOLECEK teaches a crank handle (49). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the handle of HOLECEK in order to facilitate gripping the crank.
- 2.6. With respect to claim 35, COHN fails to teach allowing the pulley to rotate in only one direction. HOLECEK teaches allowing the pulley to rotate in only one direction. It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the shaft and handle of HOLECEK in order to prevent unwanted movement of the ramp.
3. Claim(s) 16-19, 40, and 41-44 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over COHN (US 6,010,298 A) in view of LEWIS and further in view of GRANT (US 5,257,894 A).
- 3.1. With respect to claim 16, COHN additionally teaches a ramp flap and hinge (42). COHN fails to teach a wheel attached to the flap. GRANT teaches a wheel attached to the flap (68b). It would have been obvious to one of ordinary skill in the art to modify

COHN in view of LEWIS with the wheel of GRANT to enable smooth actuation of the flap and protect the ramp.

3.2. With respect to claim 17, COHN fails to teach a flap actuator bracket. GRANT teaches a flap actuator bracket (68a). It would have been obvious to one of ordinary skill in the art to modify COHN with the bracket of GRANT to enable smooth actuation of the flap and protect the ramp.

3.3. With respect to claim 18, COHN additionally teaches side lips (108).

3.4. With respect to claim 19, COHN fails to teach a cutout. GRANT teaches a cutout (28). While the cutout in GRANT receives the locking member not the wheel, the wheel drops over the proximal edge of the ramp. It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with a cutout to receive the wheel as opposed to an edge in order to more smoothly actuate the flap via movement of the ramp.

3.5. With respect to claim 40, COHN additionally teaches a ramp flap and hinge (42). COHN fails to teach a wheel attached to the flap. GRANT teaches a wheel attached to the flap (68b). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the wheel of GRANT to enable smooth actuation of the flap and protect the ramp.

3.6. With respect to claim 41, COHN fails to teach a flap actuator bracket. GRANT teaches a flap actuator bracket (68a). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the bracket of GRANT to enable smooth actuation of the flap and protect the ramp.

- 3.7. With respect to claim 42, COHN fails to teach a cutout. GRANT teaches a cutout (28). While the cutout in GRANT receives the locking member not the wheel, the wheel drops over the proximal edge of the ramp. It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with a cutout to receive the wheel as opposed to an edge in order to more smoothly actuate the flap via movement of the ramp.
- 3.8. With respect to claim 43, COHN teaches rotating a motor shaft (74), drive pulley (76), belt (80), ramp carriage assembly (108), and pivoting the platform (Fig. 2). COHN fails to teach dropping wheels of the flap into a cutout. GRANT teaches dropping wheel member (66) of a ramp flap (62) into a cutout (28) defined in the ramp platform (10) when the ramp platform deploys (Fig. 4). While the cutout in GRANT receives the locking member of the wheel not the wheel itself and the wheel drops over the proximal edge of the ramp, it would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with a cutout to receive the wheel as opposed to an edge in order to more smoothly actuate the flap via movement of the ramp.
- 3.9. With respect to claim 44, COHN teaches rotating a motor shaft (74), drive pulley (76), belt (80), ramp carriage assembly (108), and pivoting the platform (Fig. 2). COHN brackets affixed to wheels on the ramp flap. GRANT teaches a bracket (68a) having wheels (68b) attached to the flap. It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the bracket and wheels of GRANT to enable smooth actuation of the flap and protect the ramp.

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4. Claim(s) 25-31 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over COHN (US 6,010,298 A) in view of LEWIS and further in view of HUNTER (US 1,024,580 A).

4.1. With respect to claim 25, COHN fails to teach translating a sliding collar along the drive shaft. HUNTER teaches translating a sliding collar (16) along the drive shaft (4). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the clutch of HUNTER in order to selectively engage or disengage the motor.

4.2. With respect to claim 26, COHN fails to teach a pin engaging and disengaging the drive pulley. HUNTER teaches a pin (10) engaging and disengaging the drive pulley (2). Note: HUNTER teaches female member (2) being either the driving or driven member and of any suitable power transmission means. It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the clutch of HUNTER in order to selectively engage or disengage the motor.

4.3. With respect to claim 27, COHN additionally teaches a keyed collar (Fig. 7).

4.4. With respect to claim 28 and 29, COHN fails to teach passing/removing a pin of the sliding collar through an opening in the keyed collar. HUNTER teaches passing/removing a pin (10) of the sliding collar (16) through an opening (9) in the keyed collar (5). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the clutch of HUNTER in order to selectively engage or disengage the motor.

4.5. With respect to claim 30, COHN additionally teaches a spring bias opposing the release actuator (460). It would have been obvious to one of ordinary skill in the art to

put the spring bias on a collar in order to bias the clutch into an engaged position thereby preventing an unsafe condition.

4.6. With respect to claim 31, COHN fails to teach engaging the motor by inserting the pin. HUNTER teaches engaging the motor by inserting the pin (10). It would have been obvious to one of ordinary skill in the art to modify COHN in view of LEWIS with the clutch pin of HUNTER in order to selectively engage or disengage the motor.

III. Response to Applicant's Arguments

Applicant's arguments entered 12/11/06 have been fully considered.

1. Applicant argues that claim 1, as amended, is not rendered obvious by COHN in view of LEWIS because COHN does not disclose "the combination of a ramp carriage assembly for moving a ramp platform where the carriage assembly is movable with respect to both the frame and a motor coupled to the frame." This argument is not persuasive. Applicant is arguing limitations that are not claimed. There is no requirement in claim 1 that the carriage assembly be movable with respect to the motor, merely the frame. The fact that claim 1 also requires the motor be coupled to the frame does not implicitly require the carriage movable with respect to the motor because the motor could be movably coupled to the frame, as is the case in COHN, and still meet both these limitations. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.
2. Applicant argues that claim 21, as amended, is not rendered obvious by COHN in view of LEWIS because COHN does not disclose "moving a ramp carriage assembly relative to the motor." This argument is not persuasive. As noted above, the Examiner agrees that COHN

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does not disclose moving the ramp carriage relative to the motor because, in the preferred embodiment of COHN the motor moves with the ramp carriage. Though not disclosed by COHN, this configuration involves merely the rearrangement of parts, which is, however, suggested and rendered obvious by COHN as discussed above.

3. Applicant further argues that claims 1 and 21 cannot be rendered obvious by the combination of COHN in view of LEWIS because COHN teaches away from moving the carriage assembly relative to the motor. This argument is not persuasive. With respect to claim(s) 1 this argument is moot, since the carriage does not necessarily have to move with respect to the motor to meet the limitations of that claim as discussed above. The argument remains relevant to claim 21 and is therefore addressed herein. Applicant's assertion that COHN teaches away from moving the carriage relative to the motor is based on the statement in COHN that, "mounting the motor on the reciprocating device 'saves space, and does not require a mounting structure for a motor underneath or behind the rectangular enclosure (24)." The fact that COHN touts the advantages of the motor location disclosed in the preferred embodiment is not sufficient to rise to the level of teaching away from an alternate motor location. To the contrary, this statement evidences the fact that it is well-known in the art that the motor may be located on a mounting structure underneath or behind the frame, as practiced by Applicant. A known or obvious configuration does not become patentable simply because it has been described as somewhat inferior to an alternate configuration. The location of the motor does not patentably distinguish Applicant's claimed invention from the prior art.

4. Applicant argues that claim 43 is not rendered obvious by COHN in view of LEWIS and further in view of GRANT because GRANT fails to teach a ramp flap with wheels that drop into cutouts in a ramp platform. This argument is not persuasive. Applicant's argument is premised upon the assertion that "the wheels of the floating lock plate of GRANT do not drop into cutouts in a pivoted ramp platform...the wheels of the floating lock plate in GRANT instead drop into cutouts (28) provided on the second portion (26) of the loading ramp (20) which does not and cannot pivot at all." Applicant is arguing limitations which are not claimed. The claim limitation in question merely requires, "dropping wheels of a ramp flap into a cutout defined in the ramp platform when the ramp platform deploys." This limitation is rendered obvious by GRANT as discussed above. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.
5. Applicant argues that the remaining claims are allowable based on their dependence from allowable claims 1 and 21. Since claims 1 and 21 are not found to be allowable, this argument is not persuasive.

IV. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.

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3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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